Consumer Attitudes Toward Food Labeling and Other Shopping Aids

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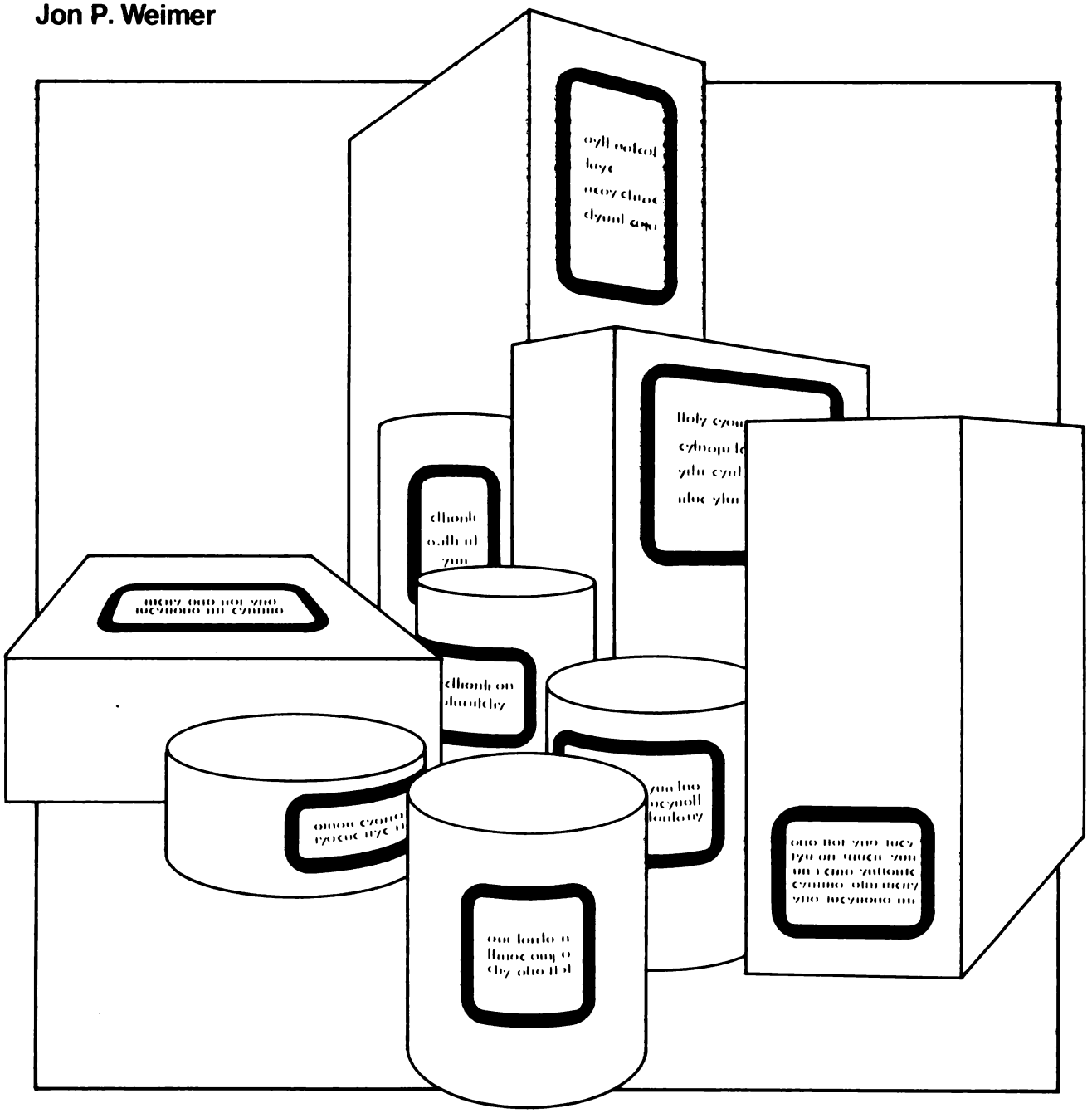

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ABSTRACT

Most shoppers need and want food labeling and other shopping aids, according to national surveys held in 1976 and 1977 to examine consumer food-related behavior. Survey results also indicate that open dating and individually priced food packages are particularly important to food shoppers. They want more food-storing instructions and nutrition data, while calling for prethaw information on frozen food packages. Shoppers in large households and those with children have a significantly greater interest in most of the shopping aids. Male shoppers, the elderly, and the less educated are least influenced by labeling information.

Keywords: Food shopper, Labeling information, Shopping aid.

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SUMMARY

Food shoppers are highly interested in food labeling information and other shopping aids, according to results of national surveys in 1976 and 1977 to analyze consumer food-related behavior.

Shoppers expressed greatest interest in open dating and price information on food packages. Interest ran high for evidence on whether a frozen food product had thawed prior to purchase. Slightly less interest was expressed in storing instructions, USDA grading of processed fruits and vegetables, and ingredient information. Successively declining interest was indicated in nutrition information, unit pricing, and name of manufacturer.

Information on drained weight of canned food was least important. However, a comparison between 1976 and 1977 survey data points to increased importance for drained weight, nutrition information, and proper storage instructions.

Consumers scored most food shopping aids relatively high, but their actual use of some aids indicates that the interest is somewhat overstated, especially on ingredient and nutrition information. There was little discrepancy, however, between shoppers' interest in and their actual use of open dating and unit pricing.

Larger households and those with children expressed significantly more interest in nearly all the shopping aids studied, except name of manufacturer, than the one- and two-member households. Open dating, storing instructions, and nutrition information were especially important to households with children. The elderly, male shoppers, and those with no high school education were more likely to indicate that most shopping aids were not particularly useful to them.

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*Richard B. Smith, Judy A. Brown, and Jon P. Weimer**

INTRODUCTION

Food-related information is increasingly being made available to consumers. The reasons vary, spurred in part by health concerns. For example, the Food and Drug Administration's (FDA) ban on certain food dyes, anxiety about some food preservatives, the rising health costs, and reports of possible links between food consumption habits and health problems have undoubtedly been partially responsible for the implementation of ingredient and nutrient information. Increased emphasis on the shopper's right-to-know and escalating food prices no doubt have contributed to unit pricing, open dating, and other shopping information.

This study measures shopper interest in food labeling and other selected food shopping aids. Primary attention focuses on consumer perception of the relative importance of the various shopping aids. Different demographic groups are isolated for analysis to determine those benefiting most from specific labeling information because shopping aids generally add to food costs. The findings should help Federal and State legislators as they consider food labeling legislation. Those involved in consumer education efforts and improved marketing procedures may draw on these findings.

A two-phase national survey was conducted during the spring of 1976 and the first quarter of 1977 to examine consumer food-related behavior, attitudes, and motives. 1/ Questions concerning the usefulness of food shopping aids were asked by personal interview. The respondents (mainly food shoppers) also were asked about their actual use of nutrition and ingredient information on food packages. The 1976 respondents were asked more indepth questions about their use of open dating and unit pricing, while the 1977 respondents answered additional questions about uniform meat names. Each phase included demographic information such as respondent age, education, and total family income. Some FDA information is the source for certain data and complements information from the U.S. Department of Agriculture (USDA).

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1/ The Response Analysis Corporation, Princeton, N.J., managed the survey under contract to the former Economic Research Service (now part of the Economics, Statistics, and Cooperatives Service), U.S. Department of Agriculture.

LEVEL AND CHANGE IN USEFULNESS OF FOOD LABELS AND OTHER SHOPPING AIDS

The usefulness of labels and other shopping aids was measured on a five-point scale: extremely useful, very useful, somewhat useful, not too useful, and not at all useful. Unsure responses to usefulness are excluded from this report.

The expressed usefulness score might be affected if shoppers were aware of the costs included in providing each shopping aid--an item difficult to measure. Certainly, some such information as marked prices on each package is more expensive to incorporate than such others as manufacturer's name or uniform meat names. Pricing individual packages requires relatively more labor than the use of a mechanical device which stamps the manufacturer's name on a label. No attempt is made in this study, however, to examine costs of the labeling information or to alert food shoppers to the possible costs involved.

Nine different labels or shopping aids were examined in the 1976 phase of the survey, compared with 12 in the 1977 phase. Table 1 summarizes the expressed opinions from about 1,400 households in each phase.

Package dates and prices appeared highly useful to nearly all the food shoppers. About two-thirds in each phase indicated these shopping aids were or might be extremely useful. Another one-quarter of the respondents said this information was very useful.

The 1977 survey showed about 85 percent of the respondents interested in an indication of whether frozen food had thawed and was refrozen (this information was not yet available in the United States). About a third of the shoppers in both surveys found uniform meat names and instructions for food storage extremely useful; another 40 percent indicated such information is very useful. Interest in storage instructions apparently increased between 1976 and 1977. A third of the 1977 shoppers indicated such instructions would be extremely useful compared with 27 percent in 1976.

Nearly 70 percent of the shoppers considered USDA grades for frozen and canned fruits and vegetables (asked only in the second phase) extremely or very useful. However, a previous USDA study found that USDA meat and poultry grades are often confused with USDA inspection and other grades (6). 2/ Therefore, some of the interest in canned and frozen fruit and vegetable grades may partially reflect interest in USDA inspection.

Both ingredient and nutrition information were considered extremely or very useful by about two-thirds of the respondents in the 1977 survey. Only 55 percent of the 1976 shoppers indicated nutrition information was extremely or very helpful to them, which suggests consumer interest in nutrition information may be increasing.

Unit pricing also appears to be gaining in popularity. Sixty-two percent of the food shoppers in the 1977 survey indicated unit pricing was or might be extremely or very useful, compared with 56 percent of the shoppers in 1976.

Name of the food manufacturer (1976 and 1977 phases) and an indication of a wax or preservative coating on fresh fruits and vegetables (1977 phase only) were each thought to be extremely or very useful by slightly more than half of the respondents. Wax or preservative coating apparently held very little or no use for 30 percent; name of manufacturer was similarly rated by about 20 percent.

2/ Underscored numbers in parentheses refer to references listed at the end of this study.

Table 1--Food shopper opinions about the usefulness of different food labels and other shopping aids

Shopping aid and years	Usefulness					Observations 1/
	Extremely	Very	Somewhat	Not too	Never	
	Percent					Number
Dates on package:						
1977	65	27	5	2	1	1,423
1976	66	24	6	2	2	1,405
Price on packages:						
1977	65	25	7	2	1	1,430
1976	71	21	5	1	2	1,409
Indication if frozen product thawed:						
1977	60	26	7	4	3	1,407
Uniform meat names:						
1977	36	41	12	7	3	1,415
1976	37	36	14	8	6	1,389
Instructions on storing:						
1977	33	39	14	10	4	1,424
1976	27	38	18	10	7	1,408
USDA-graded processed fruit and vegetables:						
1977	31	38	17	10	4	1,407
Ingredient information:						
1977	30	37	21	9	3	1,424
1976	33	32	20	10	5	1,410
Nutrition information:						
1977	31	32	22	10	5	1,422
1976	23	32	24	13	8	1,399
Unit pricing:						
1977	26	36	17	14	7	1,388
1976	26	30	19	13	12	1,344
Name of manufacturer:						
1977	23	30	28	14	5	1,418
1976	23	31	24	16	6	1,408
Indication if wax or preservative coating:						
1977	23	29	18	20	10	1,391
Drained weight:						
1977	19	26	21	23	11	1,411
1976	11	19	24	27	19	1,385

1/ The total number of observations were 1,417 in 1976 and 1,033 in 1977. Calculated positions are based on number of respondents who gave a definitive answer: those are excluded who stated "don't know" or were "not sure."

Drained weight of canned food--considered the least favorable of any of the shopping aids examined--was thought to be extremely or very useful by 45 percent of the shoppers in 1977. This information, like wax coating or name of manufacturer information, applies only to certain food items, in this case to those processed with liquid. Only 30 percent had indicated drained weight would be extremely or very useful in 1976, so interest in drained weight on food labels apparently increased. Part of the 15-point difference, however, may reflect the question's location in the earlier phase. In that survey, the question was the first one asked, and there was no rotation of questions as in the second phase.

The California and New York Consumer Affairs Departments found that a large majority of 1976 shoppers favored drained weight on food labels (1). However, consumers may indicate they are for a shopping aid and yet not actually use it in making purchase decisions.

WHICH SHOPPERS BENEFIT FROM LABELING INFORMATION?

Some shoppers may be benefiting at the expense of others who infrequently or never use labeling information. There are costs for providing the labels or shopping aids, and it is likely that most of these costs are passed through to consumers.

Respondents were categorized according to sex, age, education, employment, family income, change in income, estimated per capita income, household size, households with children, region, community size, and urbanization level. Differences in expressed usefulness of scores among the different groups helped identify primary beneficiaries of labeling information and other shopping aids.

Average usefulness scores were computed for each type of food shopping aid examined. The numerical scales were: 5--extremely useful; 4--very useful; 3--somewhat useful; 2--not too useful; and 1--not at all useful. Figure 1 depicts the satisfaction scores averaged for all respondents in both surveys.

Results for nine shopping aids studied in 1976 are presented in appendix tables 1 through 9. Results for 12 shopping aids studied in 1977 appear in appendix tables 10 through 23. The level of urbanization was not noted in the 1977 phase; and five age groups were identified in 1977 and six age groups in 1976.

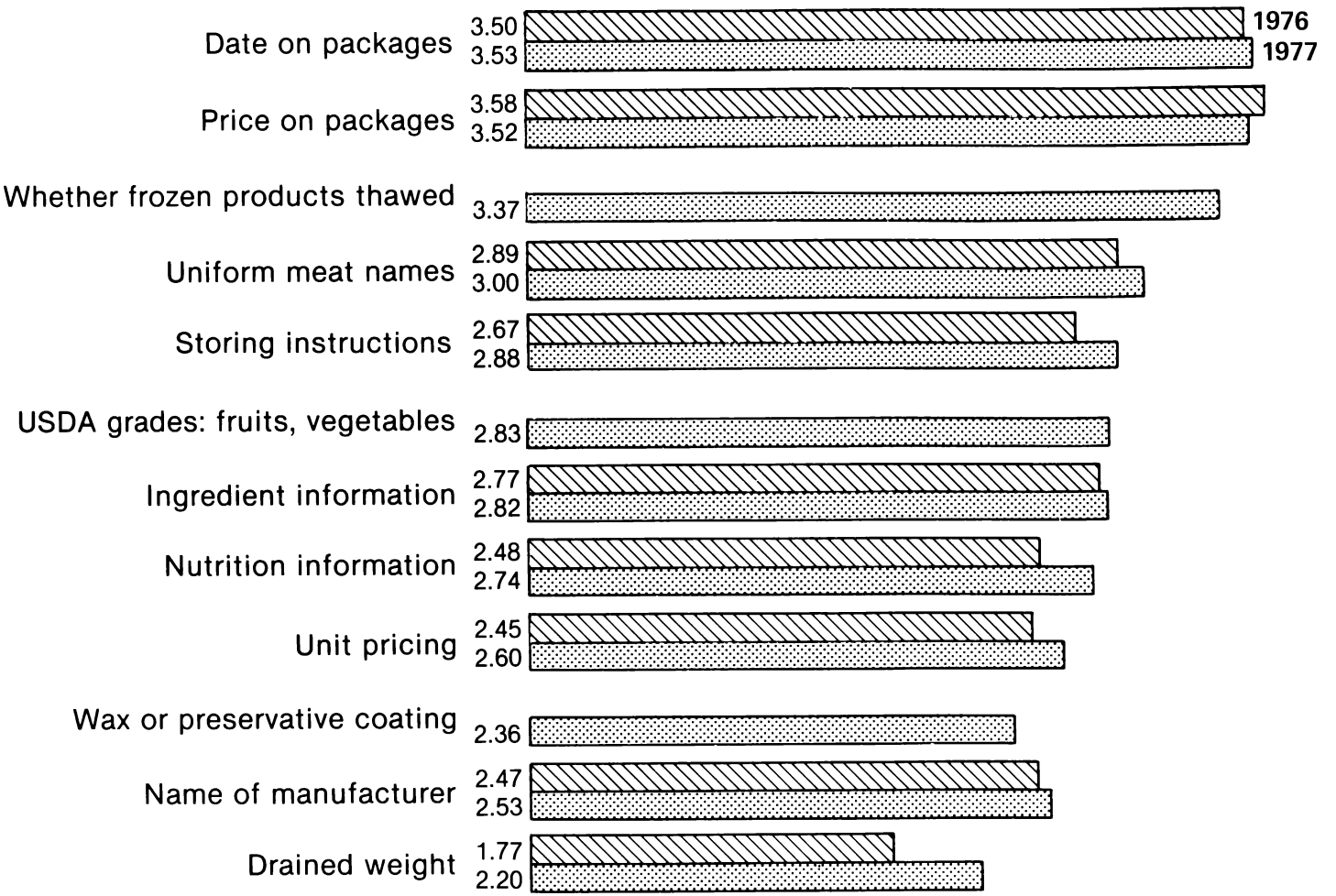
Size of Household and Children's Presence

Usefulness of all 12 second-phase shopping aids differ significantly by household size, except for name of manufacturer. Households with one or two members generally expressed significantly lower interest in food shopping information. For example, the average usefulness score associated with proper storing instructions was 2.54 in one-member households in 1977, compared with 3 for households with three or more members (appendix table 13). A low food budget for the small households may be responsible for less interest in food shopping information than expressed by households with more members. These results conform to those found in a smaller 1970 study by Safeway, Inc., which also found greater use of unit pricing among larger households (4, p. 18).

Food labeling interest increased when children were part of the household. This characteristic, of course, is related to household size, since most households with children have three or more members. Average usefulness scores for all the shopping aids, except name of manufacturer and USDA grading of canned or frozen fruits and vegetables, were significantly higher in households with children. Particularly large differences in mean scores showed for open dating, storing instructions, and nutrition

Figure 1

Average Usefulness Score of Labeling and Other Food Shopping Aids, 1976 and 1977



information in both the 1976 and 1977 phases (appendix tables 1, 4, 6, 10, 13, and 15, respectively for years and items).

Age and Education of Respondent

The usefulness of most shopping aids also was found to differ significantly by age and education of food shoppers. Those near or past retirement age and those with no high school education indicated a lower level of usefulness for the labeling information than younger and more highly educated shoppers. Some of the older respondents may have been more brand-conscious, but many apparently were unfamiliar with the labeling information or did not know how to use it.

One exception was price on food packages in the 1977 phase. Interest in this information approached the same for the elderly and the young, and it was about the same for the college graduate as for the person with an elementary education (table 6). In the 1976 phase, interest in price on the package was found to be slightly higher for the more educated and those under 65 years of age (appendix table 2).

Other studies also have found greater interest in or use for food labeling information among younger and more highly educated shoppers. For food information labels in general, FDA concluded that the better educated consumers differed from the less educated in at least two respects: they look for more things on the label, and they are more sensitive to economic information and descriptions of contents (4, p. 6). Safeway's survey also found that unit price information was used more by the college educated (3).

The 1973 FDA study found that people over 64 years of age were divided concerning nutrition labeling. This age group had the highest percentage of those reading almost all the labels, as well as those reading none. FDA's explanation for this dichotomy was that the one group may be conscious of ingredient labels for dietary reasons, and the other group may not be shopping for themselves. However, elderly persons may simply prefer certain types of foods regardless of their nutritional aspects.

Sex of Respondent

Slightly more than 10 percent of the primary food shoppers in the study were male. Primary food shoppers are those who do half or more of the food shopping.

Male shoppers exhibited little interest in shopping aids; this was evident for 8 of 12 shopping aids that averaged highest in overall usefulness in 1977. Male and female shoppers differed significantly on nine shopping aids studied in 1976, excluding name of manufacturer. Female shoppers, in particular, were more interested in open dating, storing instructions, nutrition information, and prices on packages. Women seem to be more careful shoppers than men, according to the 1975 FDA study (8, p. 80).

Total Family Income

Expressed usefulness of many of the shopping aids also differed by income level. Differences in average usefulness were found between those households with total family income below $5,000 and those with $25,000 or more. For example, average scores for open dating in the lowest income group was 3.17 in 1976 and 3.36 in 1977. This compares with 1976-77 scores of 3.71 and 3.75, respectively, for those in the highest income group (appendix tables 1 and 10).

Other shopping aids holding little interest for lower income households in 1977 included an indication of whether a frozen product had thawed, uniform meat names, and storing instructions. The lack of interest in proper storing instructions and uniform meat names appears reasonable, since lower income families typically store less food at home and are often limited in the number and kinds of meat cuts they can afford. 3/ Unit pricing and nutrition labeling were used primarily by higher income groups, according to earlier studies by Cornell University and FDA (2, 8).

Region and Other Demographics

Interest in most of the shopping aids also differed by regions of the United States. Shoppers in the South typically had slightly lower interest in many of the shopping aids than shoppers in other regions, probably reflecting differences in education and age. Nearly two-fifths of the shoppers in the 1977 survey who were 55 years of age or older were located in the South. Similarly, 44 percent of the respondents with no high school education were from the South, compared with 25 percent from the North Central, and 11 percent from the West.

The usefulness scores associated with storage instructions averaged 3.14 in the Northeast in 1977, compared with 2.74 in the South (appendix table 13). Unit pricing scores ranged from 2.44 in the South to 2.81 in the West (appendix table 16).

FDA concluded from its 1973-74 study that individuals living in the West are better informed about nutrition than those living elsewhere (7, p. 25). The 1975 FDA study showed shoppers in the South using nutrition information fewer times than shoppers in other regions (8, p. v).

Usefulness of shopping aids by other demographic variables was less noticeable. Employed shoppers (either full- or part-time) appeared to have more interest than those unemployed about whether a frozen product had thawed (appendix table 19). In 1977, unit pricing and an indication of whether fresh fruits and vegetables were wax coated were rated more useful by shoppers living in large metropolitan areas (appendix tables 16 and 21). This may reflect less opportunity for home-grown fruits or vegetables, as well as a greater opportunity for comparison shopping where several supermarkets are typically located near each other in large metropolitan areas.

ACTUAL HOUSEHOLD EXPERIENCE WITH SELECTED SHOPPING AIDS

This section examines how shoppers actually use labeling information.

Unit Pricing and Open Dating

Food shoppers in 1976 were asked if they had seen unit pricing in stores where they shop. 4/ They were provided a card displaying different types of unit pricing

3/ About 65 percent of the shoppers with family income of $15,000 or more always or almost always stored extra food items they could buy at lower prices, compared with 56 percent of those with incomes below $5,000.

4/ More complete information on unit pricing was reported in (5). Percentages cited in that publication are based on the total number of respondents asked a question (regardless if they gave a definitive answer); thus, the percentages differ slightly from those cited in this report.

labels used in supermarkets prior to answering questions. Nearly one-fourth indicated they had not seen unit pricing in the stores where they shopped. Thirty percent of the total sample of shoppers said they always looked for unit prices while shopping, and 33 percent looked sometimes. Thus, 63 percent of the shoppers indicated they used this aid, while 13 percent indicated they never used it. These figures are fairly close to the expressed usefulness figures presented earlier--56 percent indicating that it was extremely or very useful, and 12 percent indicating it would not be at all useful to them. The 1975 FDA study found that 41 percent of the consumers looked for unit-pricing information the last time they went shopping (8).

Ninety percent of the 1976 respondents claimed to have looked for open dating, and 52 percent always looked for it; 10 percent of the shoppers said they never looked for dates on packages. Again, these proportions are somewhat comparable to those obtained when respondents were asked how useful this tool would be for them--90 percent saying it was or would be extremely or very useful, and 2 percent indicating it would not be useful at all to them. Responses to questions concerning unit pricing and open dating are shown below:

Item	Yes	No	Always	Sometimes	Never	Observations
	Percent					Number
Have seen unit prices in stores	77	23				1,322
How often look for unit prices 1/			30	33	13	1,322
How often look for dates on food packages			52	38	10	1,403

1/ Not all respondents answered this question.

Nutrition and Ingredient Information

Actual use of nutrition and ingredient information appears to be somewhat less than what the expressed usefulness scores suggest. In 1977, 63 and 67 percent of the shoppers indicated that nutrition and ingredient information, respectively, would be extremely or very useful to them. Forty-four and 53 percent of the shoppers indicated they actually use nutrition and ingredient information always or almost always when they purchased a product for the first time. Responses regarding these questions appear below:

Item	Always	Almost always	Sometimes	Seldom	Never	Observations
	Percent					Number
Check for labels for ingredients before purchasing a product the first time:						
1977	31	22	24	11	12	1,428
1976	33	18	22	9	18	1,411
Read nutrition information provided on food packages before purchasing a product the first time:						
1977	24	20	24	15	17	1,426
1976	14	15	31	13	27	1,412

The 1975 FDA study found that one-third of the consumers used nutrition labeling to make choices between different foods. Forty-six percent used ingredient information for the same purpose.

As can be seen, there are some discrepancies between expressed usefulness of some of these shopping aids and indications of actual use of these aids. These discrepancies, however, are not demonstrative and could be ascribed to several factors. It is difficult to relate respondents' opinions and attitudes directly to their actual behavior. For example, just because a shopper feels that a particular shopping aid would be extremely useful does not necessarily verify the need for the aid at that time; it could be an aid that has potential value some time in the future. A shopper indicating that a shopping aid is of limited use, on the other hand, might later find it quite useful.

Further, the structure of an attitude/opinion question requires a different response category than does a question that gleans information about behavior, thus making it difficult to collate answers to the two questions. Is an "extremely useful" or "very useful" response to an opinion question comparable to an "always use" response to a question reflecting the respondent's behavior?

These inherent difficulties may preclude ever attaining a one-to-one congruency in answers. It would still be somewhat disconcerting if, for example, a majority of the shoppers indicate that open dating is extremely or very useful to them, and yet other evidence shows that a majority of these same shoppers never actually look for dates on a package. However, such large discrepancies did not occur for the selected shopping aids examined.

CONCLUSIONS AND IMPLICATIONS

The expressed importance of food labeling information varies by type of information or label. The higher usefulness score for prices on individual food packages suggests potential consumer relation problems for food retailers wishing to discontinue showing prices on individual food items. Open dating procedures may also need to be examined by some food processors who stamp dating codes that are not easily understood on products.

Some new labeling information, not as yet available to shoppers, appears to be of relatively high shopper interest, such as whether a frozen product had ever thawed prior to purchase.

The results do suggest some shopping aids are gaining in perceived importance among consumers, although there are some risks involved in projecting from 2 years of data. Nutrition information, instructions for proper storing, and drained weight of a canned food item seemed to be more important to shoppers in 1977 than 1976. However, among the shopping aids selected, the drained-weight information still appeared to be of lesser importance to most shoppers than other shopping aids.

The food labeling information seems less useful to the elderly and to the less educated. More aggressive public information programs directed toward these groups and improved educational efforts in schools could increase consumer awareness of the various shopping aids, and how the shopper may use them to improve food shopping decisions and prepare nutritious meals.

Questions on monetary redistribution arise because some groups such as the elderly and the less educated find labeling information to be less useful. To the extent that

the costs of food shopping aids are passed through to the shoppers, many are paying for information others (the educated and those less than 65 years old) find useful. Increased mandatory food labeling information would result in higher food costs without compensating benefits for many in these groups; thus, more effort is required to inform the elderly and less educated.

The degree of expressed interest in selected shopping aids available in stores is not always congruent with data on actual use of these aids by shoppers. Such discrepancies, however, are not large. Further, if found to be large, they would not necessarily invalidate these indexes of interest because these shopping aids, although not always used, may offer comfort to the shopper by their very existence, especially on a first-time purchase or brand change.

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APPENDIX--Survey Procedure

The procedure used for the survey was to divide the 48 conterminous States into small geographic segments, each consisting of a cluster of about 20 housing units, and make a systematic random selection of 200 such clusters. Probability methods were used at each stage of sample selection; thus, interviewers had no choice in which households were selected for study.

Altogether, 2,200 households made up the national sample for the first phase, and 2,141 households for the second. Of these numbers, 1,966 were selected as eligible for the first phase, and 1,985 were selected for the second. Most of the ineligible units were vacant, several reported no food was purchased for consumption in the household, and the remainder, such as military establishments, were atypical.

The completion rate among the eligible housing units was 72 percent for both phases (appendix table 22). Most of those not completed resulted from refusals and no one being home despite several callbacks.

Individual responses were weighted to reflect differences in completion rates for different geographic regions and sizes of communities. The completion rate scored highest in the South and lowest in the Northeast and West for the first phase (appendix table 23). The completion rate was also higher in the South for the second phase. However, the North Central had the lowest rate in the second phase reflecting, in part, the severe winter weather.

The questionnaire completion rate was significantly greater in the rural areas than in the large metropolitan areas. More than four-fifths of the households in rural nonstandard metropolitan statistical areas (SMSA) completed questionnaires, compared with two-thirds of the households in large SMSAs (appendix table 24). 5/

5/ Except in New England States, a standard metropolitan statistical area is a county or group of contiguous counties which contain at least one city of 50,000 inhabitants or more, or twin cities with a combined population of at least 50,000. In New England States, SMSAs consist of cities and towns instead of counties.

Appendix table 1--Usefulness of dates on food packages, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	69	23	5	2	1	1,247	3.57	65.68**
Male	42	35	12	5	6	158	3.00	
Age:								
Under 25	65	29	5	1	0	186	2.56	21.85**
25-34	77	19	3	1	0	337	3.71	
35-44	70	25	3	2	0	239	3.63	
45-54	65	24	6	3	2	229	3.49	
55-64	60	27	8	2	3	211	3.37	
65 plus	50	28	10	5	7	193	3.08	
Education:								
Elementary or less	47	27	12	7	7	207	2.98	34.54**
Some high school	60	29	6	3	2	225	3.43	
High school graduate	69	24	5	1	1	538	3.60	
Vocational or some college	71	24	3	1	1	258	3.63	
College graduate	77	19	3	0	1	172	3.71	
Employment:								
Yes	66	25	6	1	2	565	3.54	3.21
No	65	24	6	3	2	836	3.48	
Family Income:								
Under $5,000	53	26	11	5	5	217	3.17	13.17**
$5,000-$9,999	59	31	6	2	2	272	3.41	
$10,000-$14,999	72	21	5	1	1	282	3.63	
$15,000-$24,999	69	26	3	1	1	274	3.63	
$25,000 or more	77	17	5	0	1	143	3.71	
Change in income, 1976 versus 1975:								
Higher	70	22	4	2	2	496	3.58	3.70*
About the same	63	25	7	2	3	605	3.44	
Lower	63	28	7	2	0	231	3.51	
Per capita household income:								
Under $2,000	55	27	9	4	5	247	3.22	10.98**
$2,000-$3,999	67	27	4	1	1	337	3.57	
$4,000-$6,999	71	22	5	1	1	357	3.60	
$7,000 or more	68	25	5	1	1	247	3.56	
Household size:								
1	54	26	9	6	5	195	3.19	15.61**
2	63	26	7	1	3	438	3.44	
3 to 4	71	23	5	1	0	486	3.62	
5 or more	68	26	4	1	1	283	3.61	
Children:								
Yes	73	22	4	1	0	689	3.66	49.35**
No	59	27	8	3	3	714	3.35	
Region:								
Northeast	71	22	4	1	2	343	3.56	4.85**
North Central	67	23	5	2	3	400	3.50	
South	59	30	7	3	1	425	3.41	
West	69	21	8	1	1	238	3.59	
Urbanization:								
Central city	61	27	8	2	2	436	3.44	5.21**
Suburban, small urban	72	20	5	1	2	613	3.59	
Rural	61	29	5	3	2	357	3.44	
Community size:								
Large metro	69	23	6	1	1	611	3.58	6.21**
Small metro	66	22	6	3	3	520	3.46	
Nonmetro (rural)	58	33	5	3	1	275	3.41	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 are indicated by **.

Appendix table 2--Usefulness of food price on the package, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	72	21	5	1	1	1,253	3.61	15.36**
Male	60	25	8	4	3	157	3.35	
Age:								
Under 25	69	25	5	0	1	186	3.63	6.76**
25-34	72	20	5	2	1	337	3.60	
35-44	77	16	3	2	2	242	3.65	
45-54	74	18	5	2	1	231	3.63	
55-64	70	23	6	0	1	211	3.61	
65 plus	60	27	6	3	4	193	3.34	
Education:								
Elementary or less	64	23	8	3	2	208	3.45	3.22*
Some high school	69	22	5	2	2	228	3.54	
High school graduate	72	21	5	1	1	539	3.61	
Vocational or some college	73	21	5	1	0	258	3.65	
College graduate	75	19	4	0	2	171	3.65	
Employment:								
Yes	72	21	5	1	1	565	3.62	1.86
No	70	22	5	2	2	841	3.56	
Family income:								
Under $5,000	63	26	7	2	2	216	3.44	2.84*
$5,000-$9,999	66	27	5	1	1	272	3.56	
$10,000-$14,999	75	19	4	1	1	282	3.66	
$15,000-$24,999	73	21	5	0	1	277	3.63	
$25,000 or more	80	13	5	0	2	143	3.69	
Change in income, 1975 versus 1974:								
Higher	72	22	3	1	2	499	3.62	1.04
About the same	71	20	6	1	2	604	3.58	
Lower	68	22	7	3	0	232	3.53	
Per capita household income:								
Under $2,000	66	26	5	0	3	248	3.52	1.63
$2,000-$3,999	71	21	5	2	1	336	3.61	
$4,000-$6,999	75	19	4	1	1	359	3.67	
$7,000 or more	69	22	7	0	2	247	3.55	
Household size:								
1	59	26	9	3	4	194	3.32	11.83**
2	71	21	5	2	1	438	3.60	
3 to 4	72	21	5	1	1	492	3.61	
5 or more	76	20	2	1	1	283	3.69	
Children:								
Yes	76	19	3	1	1	693	3.68	20.69**
No	65	24	7	2	2	714	3.49	
Region:								
Northeast	70	20	6	2	2	345	3.54	.53
North Central	73	20	4	1	2	402	3.60	
South	68	24	6	1	1	425	3.59	
West	72	21	4	2	1	238	3.61	
Urbanization:								
Central city	68	24	5	2	1	438	3.56	.56
Suburban, small urban	73	18	6	1	1	615	3.61	
Rural	70	23	5	1	1	357	3.57	
Community size:								
Large metro	73	19	6	1	1	615	3.62	.83
Small metro	70	21	5	2	2	520	3.55	
Nonmetro (rural)	67	26	5	1	1	275	3.56	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 3--Usefulness of uniform names and description of meat cuts by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	37	36	14	7	6	1,238	2.91	4.13*
Male	34	34	10	14	8	151	2.71	
Age:								
Under 25	35	35	17	10	3	182	2.89	5.11**
25-34	39	37	14	6	4	335	3.00	
35-44	39	33	14	7	7	241	2.91	
45-54	43	35	11	7	4	228	3.04	
55-64	34	35	11	10	10	205	2.75	
65 plus	27	38	16	10	9	188	2.63	
Education:								
Elementary or less	27	37	12	14	10	200	2.58	6.89**
Some high school	34	38	16	7	5	224	2.88	
High school graduate	36	38	14	7	5	535	2.91	
Vocational or some college	42	32	13	8	5	255	2.96	
College graduate	49	29	13	4	5	170	3.11	
Employment:								
Yes	37	39	12	7	5	558	2.96	3.42
No	36	33	15	9	7	828	2.84	
Family income:								
Under $5,000	29	36	14	14	7	214	2.66	3.67**
$5,000-$9,999	32	40	14	8	6	271	2.85	
$10,000-$14,999	37	37	13	8	5	277	2.92	
$15,000-$24,999	41	37	12	5	5	275	3.04	
$25,000 or more	46	28	14	6	6	138	3.02	
Change in income, 1975 versus 1974:								
Higher	39	34	13	9	5	496	2.93	.80
About the same	35	36	14	8	7	590	2.84	
Lower	38	34	14	10	4	230	2.91	
Per capita household income:								
Under $2,000	29	36	13	14	8	243	2.65	5.18**
$2,000-$3,999	32	42	13	8	5	335	2.89	
$4,000-$6,999	41	34	16	5	4	352	3.04	
$7,000 or more	42	33	11	7	7	245	2.96	
Household size:								
1	31	36	13	12	8	195	2.70	3.82**
2	36	36	13	8	7	426	2.86	
3 to 4	40	36	13	7	4	486	3.00	
5 or more	36	35	16	6	7	280	2.77	
Children:								
Yes	39	34	14	8	5	683	2.95	4.55*
No	34	37	13	9	7	703	2.82	
Region:								
Northeast	40	37	9	6	8	337	2.94	1.24
North Central	38	35	13	8	6	396	2.90	
South	33	36	17	10	4	420	2.82	
West	39	35	14	7	5	235	2.95	
Urbanization:								
Central city	37	36	13	9	5	432	2.90	9.20**
Suburban, small urban	39	38	11	6	6	605	2.99	
Rural	32	31	18	11	8	351	2.69	
Community size:								
Large metro	40	36	11	7	6	605	2.97	7.50**
Small metro	37	36	13	8	6	514	2.91	
Nonmetro (rural)	28	33	20	12	7	270	2.65	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 4--Usefulness of instructions on proper storage, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	28	40	17	9	6	1,250	2.74	47.33**
Male	14	29	22	22	13	158	2.07	
Age:								
Under 25	31	38	19	5	7	186	2.81	11.48**
25-34	33	43	12	8	4	355	2.92	
35-44	28	38	19	10	5	245	2.76	
45-54	23	39	20	12	6	231	2.61	
55-64	24	32	23	11	10	210	2.48	
65 plus	16	37	17	16	14	191	2.24	
Education:								
Elementary or less	16	32	23	18	11	204	2.23	11.13**
Some high school	26	42	14	10	8	228	2.68	
High school graduate	27	39	19	9	6	541	2.71	
Vocational or some college	32	37	17	8	6	258	2.82	
College graduate	32	40	12	9	7	171	2.79	
Employment:								
Yes	25	41	17	11	6	564	2.67	.42
No	27	37	18	10	8	841	2.66	
Family income:								
Under $5,000	19	43	16	13	9	217	2.49	3.61
$5,000-$9,999	26	37	18	11	8	273	2.63	
$10,000-$14,999	27	39	19	8	7	283	2.69	
$15,000-$24,999	32	40	15	9	4	276	2.88	
$25,000 or more	34	34	17	7	8	143	2.79	
Change in income, 1975 versus 1974:								
Higher	28	41	17	8	6	500	2.75	4.49*
About the same	26	35	18	12	9	604	2.55	
Lower	27	39	19	10	5	231	2.74	
Per capita household income:								
Under $2,000	22	43	13	13	9	246	2.58	1.09
$2,000-$3,999	27	40	20	8	5	339	2.75	
$4,000-$6,999	31	36	17	11	5	359	2.75	
$7,000 or more	28	37	18	7	10	247	2.66	
Household size:								
1	21	34	18	12	15	196	2.34	9.11**
2	24	37	19	12	8	436	2.57	
3 to 4	29	40	18	8	5	490	2.79	
5 or more	31	40	16	10	3	283	2.83	
Children:								
Yes	31	40	16	9	4	691	2.84	29.1**
No	23	36	19	12	10	714	2.50	
Region:								
Northeast	30	39	17	7	7	345	2.77	2.41
North Central	26	39	18	11	6	402	2.69	
South	24	38	18	12	8	423	2.59	
West	26	36	17	13	8	238	2.60	
Urbanization:								
Central city	23	39	19	11	7	439	2.60	2.42
Suburban, small urban	30	38	16	9	7	614	2.74	
Rural	25	38	19	12	6	355	2.62	
Community size:								
Large metro	29	36	18	9	8	615	2.68	.94
Small metro	26	40	17	10	7	520	2.67	
Nonmetro (rural)	23	39	19	13	6	273	2.61	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 5--Usefulness of ingredient information, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	34	33	20	9	4	1,251	2.83	27.67**
Male	24	25	22	17	12	158	2.32	
Age:								
Under 25	29	30	22	11	8	186	2.61	5.20**
25-34	34	32	23	8	3	336	2.86	
35-44	35	36	19	7	3	245	2.93	
45-54	39	28	20	9	4	230	2.87	
55-64	30	34	16	10	10	211	2.65	
65 plus	25	34	20	13	8	192	2.55	
Education:								
Elementary or less	26	30	19	14	11	206	2.47	10.14**
Some high school	26	38	20	8	8	228	2.67	
High school graduate	32	30	23	11	4	540	2.75	
Vocational or some college	39	35	15	6	5	258	2.96	
College graduate	42	31	18	8	1	172	3.04	
Employment:								
Yes	31	34	21	9	5	566	2.77	.07
No	34	31	19	10	6	842	2.77	
Family income:								
Under $5,000	31	26	22	10	11	216	2.57	3.33*
$5,000-$9,999	27	34	21	11	7	273	2.62	
$10,000-$14,999	30	36	18	12	4	283	2.74	
$15,000-$24,999	33	38	19	8	2	277	2.90	
$25,000 or more	39	27	24	8	2	143	2.93	
Change in income, 1975 versus 1974								
Higher	33	32	21	9	5	500	2.77	1.22
About the same	33	31	18	11	7	606	2.72	
Lower	35	33	20	9	3	232	2.87	
Per capita household income:								
Under $2,000	28	30	21	11	10	246	2.54	6.03**
$2,000-$3,999	33	35	19	9	4	339	2.84	
$4,000-$6,999	35	35	20	6	4	360	2.91	
$7,000 or more	26	31	22	15	6	247	2.57	
Household size:								
1	26	26	19	16	13	196	2.36	9.36**
2	32	32	21	10	5	436	2.75	
3 to 4	33	36	18	8	5	492	2.86	
5 or more	37	31	22	8	2	284	2.93	
Children:								
Yes	36	33	20	7	4	694	2.90	16.71**
No	30	31	20	12	7	714	2.65	
Region:								
Northeast	36	32	18	7	7	344	2.82	3.85**
North Central	32	32	20	10	6	402	2.74	
South	28	34	22	10	6	425	2.69	
West	39	30	19	10	2	239	2.92	
Urbanization:								
Central city	28	32	23	11	6	439	2.64	3.28*
Suburban, small urban	37	32	17	9	5	614	2.86	
Rural	32	33	22	9	4	357	2.78	
Community size:								
Large metro	35	30	19	10	6	615	2.79	.36
Small metro	31	35	20	9	5	521	2.77	
Nonmetro (rural)	30	33	22	11	4	274	2.73	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 6--Usefulness of nutrition information, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	24	33	23	12	8	1,244	2.55	35.75**
Male	12	22	31	19	16	156	1.94	
Age:								
Under 25	24	33	28	7	8	186	2.57	8.64**
25-34	29	34	23	9	5	336	2.72	
35-44	22	35	28	9	6	243	2.58	
45-54	25	28	21	18	8	229	2.44	
55-64	18	31	24	13	14	210	2.25	
65 plus	18	27	20	24	11	186	2.15	
Education:								
Elementary or less	13	28	26	19	14	199	2.07	12.41**
Some high school	19	34	21	14	12	227	2.33	
High school graduate	22	32	27	12	7	541	2.50	
Vocational or some college	31	31	20	11	7	255	2.68	
College graduate	32	35	21	9	3	172	2.82	
Employment:								
Yes	23	34	24	10	9	565	2.50	.35
No	23	31	24	14	8	832	2.46	
Family income:								
Under $5,000	17	38	21	14	10	212	2.37	2.58*
$5,000-$9,999	19	32	25	14	10	271	2.36	
$10,000-$14,999	21	30	26	14	9	281	2.38	
$15,000-$24,999	28	33	23	11	5	277	2.66	
$25,000 or more	34	25	24	10	7	142	2.70	
Change in income, 1975 versus 1974:								
Higher	26	30	23	13	8	498	2.52	.74
About the same	23	32	23	12	10	601	2.45	
Lower	22	29	25	18	6	229	2.33	
Per capita household income:								
Under $2,000	18	39	22	12	9	241	2.46	.36
$2,000-$3,999	22	33	25	12	8	337	2.48	
$4,000-$6,999	25	30	25	13	7	359	2.52	
$7,000 or more	26	27	22	15	10	246	2.43	
Household size:								
1	20	24	20	22	14	192	2.12	10.78**
2	20	33	23	13	11	434	2.37	
3 to 4	26	33	24	10	7	489	2.61	
5 or more	26	33	28	10	3	282	2.68	
Children:								
Yes	26	35	25	8	6	689	2.67	33.21**
No	20	29	23	17	11	808	2.30	
Region:								
Northeast	27	25	26	10	12	342	2.46	2.57
North Central	21	32	24	16	7	399	2.44	
South	20	35	24	13	8	419	2.45	
West	27	34	21	11	7	239	2.64	
Urbanization:								
Central city	22	32	23	13	10	436	2.42	.72
Suburban, small urban	25	29	25	13	8	611	2.49	
Rural	22	36	23	11	8	353	2.53	
Community size:								
Large metro	24	32	24	11	9	613	2.51	.29
Small metro	23	30	24	14	9	515	2.45	
Nonmetro (rural)	20	35	24	13	8	271	2.45	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 7--Usefulness of unit pricing, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	26	31	19	13	11	1,196	2.49	9.86**
Male	24	21	20	16	19	149	2.13	
Age:								
Under 25	24	33	22	11	10	182	2.52	11.04**
25-34	32	29	17	12	10	325	2.62	
35-44	29	32	20	12	7	237	2.65	
45-54	27	31	19	12	11	222	2.51	
55-64	22	29	17	16	16	196	2.25	
65 plus	15	24	22	21	20	173	1.92	
Education:								
Elementary or less	16	28	18	22	16	183	2.07	10.05**
Some high school	20	32	19	16	15	213	2.30	
High school graduate	27	28	20	12	13	523	2.44	
Vocational or some college	30	34	20	8	8	249	2.69	
College graduate	35	30	17	11	7	172	2.74	
Employment:								
Yes	26	30	20	12	12	546	2.49	1.47
No	25	30	19	14	12	796	2.42	
Family Income:								
Under $5,000	17	32	17	15	19	195	2.14	5.66**
$5,000-$9,999	22	33	18	15	12	260	2.38	
$10,000-$14,999	26	28	23	13	10	274	2.48	
$15,000-$24,999	34	31	17	9	9	273	2.72	
$25,000 or more	29	34	17	12	8	139	2.64	
Change in income, 1975 versus 1974								
Higher	27	33	17	14	9	490	2.55	2.87
About the same	24	30	20	12	14	566	2.36	
Lower	28	25	18	17	12	221	2.39	
Per capita household income:								
Under $2,000	23	31	15	14	17	221	2.30	1.77
$2,000-$3,999	25	34	21	12	8	324	2.54	
$4,000-$6,999	29	32	18	11	10	353	2.59	
$7,000 or more	25	27	21	14	13	244	2.37	
Household size:								
1	14	20	24	19	23	183	1.83	16.23**
2	25	31	17	15	12	420	2.42	
3 to 4	28	32	21	11	8	470	2.60	
5 or more	30	32	18	12	8	268	2.65	
Children:								
Yes	30	33	19	11	7	663	2.66	34.4**
No	22	28	19	16	15	679	2.24	
Region:								
Northeast	27	25	22	11	15	329	2.39	4.77**
North Central	29	31	15	13	12	389	2.52	
South	19	32	22	16	11	398	2.32	
West	29	33	18	12	8	228	2.62	
Urbanization:								
Central city	20	32	20	15	13	407	2.31	2.66
Suburban, small urban	28	28	19	13	12	592	2.48	
Rural	29	30	18	14	9	345	2.55	
Community size:								
Large metro	25	29	20	13	13	585	2.40	1.29
Small metro	25	30	19	15	11	494	2.43	
Nonmetro (rural)	28	33	17	13	9	266	2.58	

1/ F values significant at 0.01 level are indicated by **.

Appendix table 8--Usefulness of name of manufacturer, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	22	31	25	16	6	1,250	2.47	0
Male	25	31	19	16	9	158	2.47	
Age:								
Under 25	14	28	34	18	6	186	2.24	2.15
25-34	21	29	28	17	5	336	2.43	
35-44	29	26	20	19	6	242	2.52	
45-54	24	37	20	13	6	231	2.60	
55-64	25	34	20	13	8	211	2.57	
65 plus	23	31	22	14	10	192	2.42	
Education:								
Elementary or less	21	28	20	19	12	207	2.28	3.20*
Some high school	25	29	22	17	7	228	2.46	
High school graduate	24	30	25	15	6	538	2.52	
Vocational or some college	22	36	24	14	4	258	2.57	
College graduate	20	29	28	16	7	172	2.38	
Employment:								
Yes	21	33	25	14	7	564	2.47	0
No	24	29	24	17	6	841	2.47	
Family income:								
Under $5,000	20	28	23	20	9	214	2.30	1.65
$5,000-$9,999	22	29	25	18	6	273	2.43	
$10,000-$14,999	20	36	23	15	6	283	2.49	
$15,000-$24,999	22	32	27	14	5	277	2.52	
$25,000 or more	29	28	24	14	5	143	2.62	
Change in income, 1976 versus 1975								
Higher	22	30	27	14	7	500	2.46	.01
About the same	23	31	23	16	7	603	2.46	
Lower	24	31	18	22	5	231	2.45	
Per capita household income:								
Under $2 000	19	28	23	21	9	244	2.28	4.03**
$2,000-$3,999	20	31	25	17	7	339	2.40	
$4,000-$6,999	28	31	23	13	5	360	2.65	
$7,000 or more	20	33	26	15	6	247	2.46	
Household size:								
1	20	26	23	21	10	197	2.23	5.52**
2	25	33	25	11	6	436	2.61	
3 to 4	20	31	25	17	7	489	2.40	
5 or more	25	31	22	18	4	283	2.54	
Children:								
Yes	24	30	23	17	6	690	2.49	.56
No	21	32	24	15	8	715	2.45	
Region:								
Northeast	26	31	21	13	9	343	2.53	1.42
North Central	19	32	24	18	7	402	2.38	
South	24	28	25	17	6	424	2.48	
West	23	30	28	14	5	239	2.52	
Urbanization:								
Central city	21	32	23	16	8	435	2.42	.76
Suburban, small urban	25	28	24	16	7	615	2.49	
Rural	22	33	25	15	5	358	2.50	
Community size:								
Large metro	22	30	26	15	7	614	2.45	.13
Small metro	25	30	22	16	7	519	2.52	
Nonmetro (rural)	19	34	24	18	5	275	2.44	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are are indicated by **.

Appendix table 9--Usefulness of drained weight of canned food, by 12 demographic variables, 1976

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	12	19	24	27	18	154	1.80	5.12*
Male	9	7	21	28	25	1,231	1.56	
Age:								
Under 25	7	15	26	32	20	186	1.57	1.68
25-34	11	18	27	28	16	330	1.82	
35-44	13	20	25	24	17	239	1.86	
45-54	14	18	21	27	20	229	1.80	
55-64	10	26	20	24	20	204	1.83	
65 plus	11	17	21	29	22	188	1.68	
Education:								
Elementary or less	8	20	19	28	25	196	1.60	2.85*
Some high school	10	16	29	29	16	223	1.77	
High school graduate	11	17	25	28	19	534	1.74	
Vocational or some college	14	22	24	24	16	256	1.97	
College graduate	14	21	19	26	20	170	1.83	
Employment:								
Yes	10	20	22	29	19	554	1.75	.14
No	12	19	25	26	18	828	1.79	
Family income:								
Under $5,000	10	16	23	28	22	211	1.64	1.73
$5,000-$9,999	9	18	24	31	18	269	1.69	
$10,000-$14,999	12	18	26	28	16	279	1.82	
$15,000-$24,999	10	21	26	25	18	276	1.79	
$25,000 or more	18	20	21	24	17	141	1.98	
Change in income: 1975 versus 1974								
Higher	10	19	26	25	20	494	1.74	.85
About the same	12	18	21	29	20	593	1.74	
Lower	12	22	25	24	17	226	1.86	
Per capita household income:								
Under $2,000	10	17	24	30	19	242	1.70	1.44
$2,000-$3,999	9	17	27	30	17	330	1.70	
$4,000-$6,999	12	21	28	24	15	358	1.92	
$7,000 or more	14	18	17	28	23	246	1.71	
Household size:								
1	13	15	20	26	26	192	1.63	1.97
2	10	20	22	27	21	432	1.68	
3 to 4	11	20	27	26	16	479	1.83	
5 or more	13	20	25	29	13	279	1.91	
Children:								
Yes	13	19	26	26	16	678	1.88	10.19**
No	9	19	22	29	21	705	1.66	
Region:								
Northeast	12	14	22	26	26	337	1.59	4.70**
North Central	11	24	23	27	15	397	1.91	
South	12	17	24	28	19	415	1.76	
West	10	21	27	27	15	236	1.84	
Urbanization:								
Central city	11	20	21	29	19	425	1.74	.22
Suburban, small urban	13	19	24	24	20	605	1.80	
Rural	9	19	26	30	16	355	1.77	
Community size:								
Large metro	11	19	24	26	20	603	1.75	.09
Small metro	13	20	22	26	19	508	1.81	
Nonmetro (rural)	9	19	26	32	14	275	1.77	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 10--Usefulness of dates on food packages, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	68	26	4	1	1	1,208	3.58	34.41**
Male	49	36	10	2	3	213	3.25	
Age:								
Under 25	73	23	2	1	1	156	3.68	11.49**
25-34	70	26	3	1	0	335	3.66	
35-49	66	26	6	1	1	350	3.56	
50-64	63	27	6	2	2	357	3.48	
65 plus	52	33	6	5	4	226	3.24	
Education:								
Elementary or less	52	32	9	2	5	210	3.23	9.08**
Some high school	63	29	5	2	1	223	3.50	
High school graduate	68	26	4	1	1	498	3.61	
Vocational or some college	68	25	4	2	1	281	3.59	
College graduate	68	26	5	1	0	203	3.59	
Employment:								
Yes	64	28	6	1	1	619	3.54	.12
No	66	26	4	8	2	796	3.52	
Family Income:								
Under $5,000	54	35	5	4	2	196	3.36	6.07**
$5,000-$9,999	66	25	6	2	1	259	3.54	
$10,000-$14,999	65	30	3	2	0	266	3.57	
$15,000-$24,999	66	26	7	0	1	301	3.56	
$25,000 or more	80	16	3	0	1	144	3.75	
Change in income, 1976 versus 1975:								
Higher	64	27	7	1	1	488	3.53	1.69
About the same	61	31	4	2	2	446	3.47	
Lower	67	26	5	1	1	458	3.56	
Per capita household income:								
Under $2,000	66	27	5	2	0	197	3.56	.11
$2,000-$3,999	64	29	4	2	1	330	3.53	
$4,000-$6,999	66	25	6	2	1	346	3.54	
$7,000 or more	66	27	5	1	1	294	3.57	
Household size:								
1	52	33	9	4	2	250	3.29	14.98**
2	63	29	4	2	2	429	3.49	
3 to 4	72	22	4	1	1	506	3.64	
5 or more	68	26	5	1	0	239	3.60	
Children:								
Yes	73	21	4	1	1	618	3.66	32.40**
No	58	32	6	2	2	781	3.42	
Region:								
Northeast	67	28	3	1	1	398	3.60	2.91*
North Central	66	24	6	2	2	407	3.51	
South	60	31	5	2	2	380	3.46	
West	67	24	6	2	1	239	3.53	
Community size:								
Large metro	67	26	5	1	1	527	3.58	2.89*
Small metro	63	29	5	2	1	480	3.49	
Nonmetro (rural)	64	27	6	2	1	417	3.50	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 11--Usefulness of food price on the package, by 11 demographic variables, 1977

Demographic variables	Usefulness					Obser-vations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	63	24	6	1	1	1,212	3.58	40.01**
Male	50	30	13	5	2	215	3.21	
Age:								
Under 25	63	26	9	2	0	156	3.51	.92
25-34	68	21	9	2	0	335	3.54	
35-49	68	24	5	2	1	351	3.55	
50-64	66	25	6	2	1	360	3.54	
65 plus	59	31	8	1	1	228	3.45	
Education:								
Elementary or less	65	27	5	1	2	211	3.53	.18
Some high school	60	34	4	1	1	223	3.52	
High school graduate	67	22	7	3	1	498	3.52	
Vocational or some college	68	21	9	2	0	283	3.56	
College graduate	63	25	11	0	1	203	3.49	
Employment:								
Yes	64	24	8	3	1	620	3.43	2.99
No	67	25	6	1	1	802	3.56	
Family income:								
Under $5,000	66	27	5	2	0	201	3.58	1.20
$5,000-$9,999	59	31	7	2	1	259	3.47	
$10,000-$14,999	68	24	5	3	0	266	3.58	
$15,000-$24,999	70	19	9	2	0	301	3.57	
$25,000 or more	63	24	8	2	3	144	3.43	
Change in income, 1976 versus 1975:								
Higher	64	26	7	3	0	489	3.52	1.29
About the same	62	27	9	1	1	450	3.47	
Lower	70	22	5	2	1	460	3.58	
Per capita household income:								
Under $2,000	69	26	4	1	0	199	3.63	2.47
$2,000-$3,999	66	27	5	2	0	333	3.56	
$4,000-$6,999	68	21	7	3	1	346	3.54	
$7,000 or more	60	26	11	2	1	294	3.43	
Household size:								
1	57	28	9	5	1	253	3.36	7.34**
2	66	23	8	2	1	432	3.51	
3 to 4	67	25	6	1	1	506	3.57	
5 or more	70	24	5	0	1	240	3.62	
Children:								
Yes	69	23	6	1	1	619	3.60	12.51**
No	62	26	8	3	1	786	3.46	
Region:								
Northeast	69	22	6	2	1	400	3.56	.75
North Central	63	28	7	1	1	407	3.52	
South	63	27	7	2	1	385	3.50	
West	67	20	10	3	0	239	3.51	
Community size:								
Large metro	68	21	7	2	2	529	3.53	.18
Small metro	64	26	7	3	0	485	3.51	
Nonmetro (rural)	63	28	8	1	0	417	3.53	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 12--Usefulness of uniform names and descriptions of meat cuts, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	38	41	11	7	3	1,197	3.03	15.14**
Male	27	41	17	10	5	215	2.74	
Age:								
Under 25	32	46	14	5	3	156	2.99	11.27**
25-34	42	37	13	6	2	329	3.09	
35-49	40	42	11	5	3	349	3.07	
50-64	39	40	12	6	3	357	3.07	
65 plus	21	43	15	15	6	224	2.58	
Education:								
Elementary or less	21	44	17	13	5	208	2.61	9.56**
Some high school	35	39	14	8	4	221	2.94	
High school graduate	38	43	12	6	1	495	3.10	
Vocational or some college	41	40	11	5	3	283	3.12	
College graduate	40	38	11	6	5	200	3.02	
Employment:								
Yes	35	43	13	7	2	617	3.01	.08
No	37	39	12	8	4	789	2.98	
Family income:								
Under $5,000	25	42	19	9	5	195	2.73	7.54**
$5,000-$9,999	34	42	11	9	4	256	2.93	
$10,000-$14,999	38	46	9	6	1	266	3.12	
$15,000-$24,999	39	35	17	6	3	300	3.01	
$25,000 or more	52	36	5	4	3	142	3.29	
Change in income, 1976 versus 1975:								
Higher	35	42	12	8	3	482	2.98	1.15
About the same	34	40	13	8	5	443	2.92	
Lower	39	41	12	5	3	459	3.07	
Per capita household income:								
Under $2,000	31	41	13	8	2	195	2.91	2.31
$2,000-$3,999	33	41	13	9	4	329	2.90	
$4,000-$6,999	41	40	10	7	2	343	3.09	
$7,000 or more	40	40	12	5	3	292	3.09	
Household size:								
1	27	42	16	10	5	248	2.75	8.37**
2	32	46	11	7	4	429	2.94	
3 to 4	42	37	13	6	2	503	3.13	
5 or more	39	39	11	8	3	234	3.03	
Children:								
Yes	40	39	12	8	2	610	3.07	6.54*
No	33	43	13	7	4	780	2.92	
Region:								
Northeast	43	41	10	3	3	399	3.19	8.95**
North Central	37	40	14	7	2	404	3.02	
South	30	44	14	9	3	375	2.88	
West	33	38	10	12	7	237	2.79	
Community size:								
Large metro	42	37	11	6	4	526	3.07	4.34*
Small metro	35	42	13	7	3	472	2.99	
Nonmetro (rural)	30	45	13	9	3	416	2.88	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 are indicated by **.

Appendix table 13--Usefulness of instructions on proper storage, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	35	40	13	9	3	1,207	2.94	28.35**
Male	25	36	18	13	8	215	2.56	
Age:								
Under 25	41	34	13	11	1	156	3.03	13.27**
25-34	39	40	12	6	3	335	3.07	
35-49	36	41	13	7	3	351	3.01	
50-64	28	40	17	11	4	360	2.76	
65 plus	22	38	14	19	7	223	2.48	
Education:								
Elementary or less	24	36	18	16	6	210	2.55	7.88**
Some high school	27	40	16	15	2	223	2.73	
High school graduate	37	40	13	6	4	498	3.01	
Vocational or some college	35	42	12	8	3	283	2.97	
College graduate	37	36	15	9	3	203	2.95	
Employment:								
Yes	32	40	15	11	2	620	2.88	0
No	34	38	14	10	4	796	2.88	
Family income:								
Under $5,000	27	36	21	12	4	196	2.68	5.81**
$5,000-$9,999	33	41	11	11	4	259	2.88	
$10,000-$14,999	34	42	11	10	3	266	2.94	
$15,000-$24,999	34	46	14	5	1	301	3.08	
$25,000 or more	41	33	13	9	4	144	2.98	
Change in income, 1976 versus 1975:								
Higher	32	42	13	9	4	487	2.90	4.42*
About the same	28	39	17	12	4	446	2.74	
Lower	40	36	12	10	2	460	3.01	
Per capita household income:								
Under $2,000	34	36	19	8	3	199	2.90	1.28
$2,000-$3,999	31	41	13	12	3	328	2.85	
$4,000-$6,999	34	42	12	9	3	346	2.95	
$7,000 or more	36	41	13	7	3	294	2.99	
Household size:								
1	25	38	13	16	8	248	2.54	11.90**
2	30	41	16	10	3	434	2.87	
3 to 4	39	37	13	9	2	504	3.00	
5 or more	35	42	15	6	2	239	3.01	
Children:								
Yes	39	39	12	7	3	619	3.05	28.53**
No	28	39	16	12	5	782	2.74	
Region:								
Northeast	42	39	11	6	2	399	3.14	11.64**
North Central	30	38	19	10	3	407	2.82	
South	29	39	14	14	4	381	2.74	
West	31	41	12	9	7	238	2.78	
Community size:								
Large metro	40	35	13	8	4	528	2.97	3.76*
Small metro	29	45	14	9	3	481	2.87	
Nonmetro (rural)	29	39	16	14	2	416	2.78	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 are indicated by **.

Appendix table 14--Usefulness of ingredient information, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	31	38	19	9	3	1,207	2.86	20.10**
Male	22	34	27	12	5	214	2.54	
Age:								
Under 25	32	32	26	8	2	156	2.84	.70
25-34	32	34	22	10	2	334	2.86	
35-49	32	36	20	9	3	351	2.85	
50-64	26	40	21	10	3	360	2.78	
65 plus	26	43	14	11	6	224	2.72	
Education:								
Elementary or less	23	44	20	8	5	211	2.28	4.51**
Some high school	22	42	20	14	2	223	2.68	
High school graduate	31	34	20	11	4	497	2.78	
Vocational or some college	29	39	22	7	3	283	2.85	
College graduate	43	31	19	6	1	203	3.09	
Employment:								
Yes	29	37	21	11	2	619	2.78	1.79
No	31	38	20	8	3	797	2.84	
Family income:								
Under $5,000	22	41	20	13	4	197	2.66	2.29
$5,000-$9,999	25	43	19	10	3	258	2.79	
$10,000-$14,999	34	35	19	9	3	266	2.89	
$15,000-$24,999	31	37	23	6	3	300	2.87	
$25,000 or more	34	36	22	7	1	144	2.97	
Change in income, 1976 versus 1975:								
Higher	30	38	22	7	3	485	2.85	.20
About the same	26	41	19	11	3	447	2.76	
Lower	32	34	20	11	3	460	2.82	
Per capita household income:								
Under $2,000	23	38	22	12	5	199	2.64	2.95*
$2,000-$3,999	30	43	18	8	1	328	2.93	
$4,000-$6,999	31	37	20	8	4	345	2.84	
$7,000 or more	31	35	23	9	2	294	2.83	
Household size:								
1	26	37	19	13	5	249	2.64	3.37*
2	27	42	20	8	3	433	2.82	
3 to 4	32	35	21	10	2	504	2.86	
5 or more	33	34	22	8	3	239	2.86	
Children:								
Yes	33	34	22	9	2	618	2.86	1.88
No	27	40	20	10	3	782	2.78	
Region:								
Northeast	35	34	21	7	3	399	2.93	3.53
North Central	26	38	21	11	4	406	2.71	
South	27	41	19	10	3	381	2.79	
West	32	34	22	10	2	239	2.85	
Community size:								
Large metro	35	33	20	8	4	528	2.87	.74
Small metro	27	40	19	11	3	480	2.78	
Nonmetro (rural)	26	39	23	10	2	416	2.77	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 15--Usefulness of nutrition information, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	33	33	21	9	4	1,206	2.81	33.02**
Male	24	27	23	18	8	213	2.40	
Age:								
Under 25	30	33	27	8	2	156	2.82	7.30**
25-34	34	30	26	7	3	334	2.86	
35-49	36	33	17	10	4	348	2.89	
50-64	27	36	17	14	6	360	2.64	
65 plus	25	27	26	12	10	224	2.46	
Education:								
Elementary or less	24	33	24	11	8	212	2.55	3.77**
Some high school	30	30	22	11	7	223	2.66	
High school graduate	29	34	23	10	4	497	2.74	
Vocational or some college	37	29	19	10	5	282	2.83	
College graduate	37	32	20	10	1	199	2.94	
Employment:								
Yes	30	31	22	13	4	615	2.71	1.25
No	32	33	21	9	5	789	2.77	
Family income:								
Under $5,000	29	25	27	12	7	197	2.59	2.76*
$5,000-$9,999	29	35	20	10	6	258	2.73	
$10,000-$14,999	33	35	18	9	5	266	2.83	
$15,000-$24,999	31	31	24	11	3	300	2.77	
$25,000 or more	39	35	15	8	3	141	2.99	
Change in income, 1976 versus 1975:								
Higher	34	33	20	9	4	485	2.84	1.02
About the same	30	31	24	10	5	445	2.70	
Lower	30	32	21	13	4	460	2.71	
Per capita household income:								
Under $2,000	34	30	23	7	6	196	2.78	.46
$2,000-$3,999	31	29	24	12	4	330	2.72	
$4,000-$6,999	32	35	20	9	4	343	2.80	
$7,000 or more	32	34	19	12	3	293	2.77	
Household size:								
1	25	28	24	16	7	250	2.49	12.01**
2	29	31	22	12	6	431	2.65	
3 to 4	33	35	21	9	2	505	2.87	
5 or more	36	34	19	7	4	236	2.92	
Children:								
Yes	34	34	21	8	3	616	2.89	18.28**
No	28	31	22	13	6	781	2.63	
Region:								
Northeast	35	34	17	10	4	400	2.84	1.48
North Central	29	32	24	11	4	404	2.70	
South	30	32	23	10	5	381	2.72	
West	31	30	23	11	5	237	2.71	
Community size:								
Large metro	35	30	19	11	5	526	2.77	.10
Small metro	30	36	18	11	5	478	2.74	
Nonmetro (rural)	28	31	29	8	4	417	2.72	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 16--Usefulness of unit pricing, by 11 demographic variables, 1977

Demographic variables	Usefulness					Obser-vations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	26	35	18	14	7	1,172	2.60	0.32
Male	26	36	14	18	6	213	2.58	
Age:								
Under 25	25	42	15	12	6	150	2.67	5.62**
25-34	28	37	17	11	7	327	2.69	
35-49	31	30	17	15	7	345	2.65	
50-64	27	37	16	15	5	351	2.67	
65 plus	15	35	19	19	13	215	2.19	
Education:								
Elementary or less	21	35	11	20	13	198	2.33	8.40**
Some high school	24	39	16	14	7	213	2.57	
High school graduate	23	33	24	13	7	485	2.50	
Vocational or some college	27	38	15	15	5	279	2.68	
College graduate	30	35	12	9	4	201	2.98	
Employment:								
Yes	27	36	19	13	5	610	2.68	4.91*
No	25	35	16	15	9	769	2.52	
Family income:								
Under $5,000	21	35	17	19	8	184	2.44	2.40*
$5,000-$9,999	26	39	14	14	7	254	2.64	
$10,000-$14,999	22	39	19	13	7	263	2.57	
$15,000-$24,999	31	32	17	15	6	295	2.66	
$25,000 or more	37	33	13	10	7	144	2.84	
Change in income, 1976 versus 1975:								
Higher	28	34	18	13	7	471	2.63	.53
About the same	23	39	19	14	5	449	2.59	
Lower	28	34	14	16	8	437	2.58	
Per capita household income:								
Under $2,000	29	33	15	16	7	186	2.61	.38
$2,000-$3,999	25	39	16	12	8	319	2.63	
$4,000-$6,999	25	35	20	12	8	343	2.56	
$7,000 or more	30	36	13	16	5	291	2.69	
Household size:								
1	20	33	16	20	11	240	2.31	5.91**
2	26	35	17	15	7	423	2.58	
3 to 4	28	36	19	12	5	495	2.69	
5 or more	30	38	14	12	6	230	2.73	
Children:								
Yes	29	37	16	13	5	602	2.70	9.91**
No	24	34	18	16	8	763	2.50	
Region:								
Northeast	30	34	16	13	7	395	2.68	5.16**
North Central	24	35	19	14	8	394	2.54	
South	20	38	18	16	8	366	2.44	
West	34	35	14	12	5	233	2.81	
Community size:								
Large metro	32	34	14	14	6	525	2.72	5.30**
Small metro	26	34	21	13	6	466	2.61	
Nonmetro (rural)	19	39	16	17	9	397	2.42	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 17--Usefulness of name of manufacturer, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	23	30	29	14	4	1,202	2.55	3.38
Male	22	28	28	15	7	214	2.42	
Age:								
Under 25	17	26	37	18	2	153	2.36	4.72**
25-34	18	28	33	17	4	334	2.38	
35-49	27	30	29	11	3	347	2.66	
50-64	25	32	25	14	4	359	2.59	
65 plus	25	33	20	13	9	225	2.53	
Education:								
Elementary or less	20	34	23	16	7	210	2.45	1.36
Some high school	25	34	23	14	4	222	2.61	
High school graudate	24	29	29	14	4	494	2.54	
Vocational or some college	26	31	25	14	4	282	2.60	
College graduate	17	23	43	14	3	203	2.38	
Employment:								
Yes	20	30	31	14	5	617	2.45	4.43*
No	25	30	26	14	5	793	2.59	
Family income:								
Under $5,000	19	31	25	18	7	197	2.37	1.94
$5,000-$9,999	23	33	23	15	6	258	2.50	
$10,000-$14,999	25	23	33	17	2	265	2.52	
$15,000-$24,000	22	26	33	16	3	301	2.48	
$25,000 or more	22	37	28	9	4	143	2.65	
Change in income, 1976 versus 1975:								
Higher	19	31	30	15	5	486	2.45	1.35
About the same	25	34	24	12	5	444	2.62	
Lower	24	26	31	15	4	459	2.51	
Per capita household income:								
Under $2,000	20	30	25	21	4	196	2.40	.67
$2,000-$3,999	24	30	26	14	6	330	2.53	
$4,000-$6,999	22	29	31	15	3	345	2.51	
$7,000 or more	22	28	33	13	4	293	2.51	
Household size:								
1	21	26	32	13	8	249	2.40	1.23
2	24	31	25	14	6	431	2.53	
3 to 4	22	32	29	15	2	501	2.57	
5 or more	24	28	30	16	2	237	2.55	
Children								
Yes	23	29	30	15	3	617	2.52	0
No	23	31	27	14	5	778	2.52	
Region:								
Northeast	22	31	32	13	2	397	2.56	3.51*
North Central	22	32	31	10	5	403	2.58	
South	25	32	22	15	6	380	2.56	
West	23	22	27	22	6	238	2.33	
Community size:								
Large metro	25	28	31	13	3	525	2.60	3.02
Small metro	23	27	28	16	6	476	2.46	
Nonmetro (rural)	20	35	26	15	4	417	2.50	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 18--Usefulness of drained weight of canned food, by 11 demographic variables, 1977

Demographic variables	Usefulness					Obser-vations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex								
Female	19	26	22	23	10	1,193	2.20	1.36
Male	18	27	17	23	15	215	2.11	
Age:								
Under 25	14	29	20	25	12	156	2.09	3.29*
25-34	18	26	25	23	8	329	2.23	
35-49	23	27	18	20	12	347	2.30	
50-64	21	26	21	23	9	357	2.27	
65 plus	15	22	20	27	16	223	1.92	
Education:								
Elementary or less	18	22	23	23	14	204	2.07	2.74*
Some high school	20	31	21	19	9	222	2.35	
High school graduate	18	24	21	25	12	493	2.10	
Vocational or some college	23	24	21	23	9	281	2.27	
College graduate	19	33	18	21	9	203	2.31	
Employment:								
Yes	19	28	21	22	10	617	2.22	.41
No	20	24	20	24	12	786	2.17	
Family income:								
Under $5,000	16	26	19	28	11	194	2.08	.72
$5,000-$9,999	16	29	22	24	9	255	2.20	
$10,000-$14,999	22	27	19	22	10	264	2.27	
$15,000-$24,999	19	26	24	22	9	300	2.23	
$25,000 or more	21	26	22	21	10	142	2.25	
Change in income, 1976 versus 1975:								
Higher	19	25	23	23	10	483	2.22	.10
About the same	17	25	24	23	11	443	2.14	
Lower	21	27	17	23	12	454	2.21	
Per capita household income:								
Under $2,000	24	23	19	24	10	194	2.28	.12
$2,000-$3,999	15	29	22	26	8	325	2.17	
$4,000-$6,999	19	24	23	22	12	345	2.17	
$7,000 or more	19	30	20	22	9	291	2.27	
Household size:								
1	16	26	16	25	16	248	1.99	3.86**
2	18	26	20	24	12	430	2.15	
3 to 4	20	26	23	22	9	498	2.27	
5 or more	24	25	22	20	9	235	2.33	
Children:								
Yes	21	26	22	22	9	610	2.28	5.03*
No	18	26	20	23	13	776	2.12	
Region:								
Northeast	20	29	18	21	12	392	2.25	1.8
North Central	17	26	21	25	11	406	2.14	
South	17	26	23	22	12	376	2.13	
West	25	21	20	24	10	236	2.28	
Community size:								
Large metro	21	26	19	21	13	521	2.21	.36
Small metro	20	24	23	22	11	475	2.21	
Nonmetro (rural)	16	28	21	26	9	415	2.15	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 19--Usefulness of whether frozen food products have thawed at any time before purchase, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	62	25	7	4	2	1,193	3.40	10.32**
Male	54	27	7	7	5	211	3.17	
Age:								
Under 25	59	27	6	3	5	155	3.32	8.25**
25-34	66	23	7	3	1	328	3.51	
35-49	65	24	5	4	2	346	3.46	
50-64	60	25	8	4	3	354	3.36	
65 plus	46	32	8	8	6	2.25	3.05	
Education:								
Elementary or less	44	27	12	11	6	203	2.92	16.78**
Some high school	52	32	6	4	6	223	3.19	
High school graduate	64	24	7	3	2	492	3.45	
Vocational or some college	71	21	4	3	1	280	3.59	
College graduate	65	26	5	3	1	202	3.51	
Employment:								
Yes	64	26	6	3	1	613	3.47	11.70**
No	58	25	7	6	4	786	3.28	
Family income:								
Under $5,000	47	28	11	10	4	191	3.02	14.41**
$5,000-$9,999	56	31	8	2	3	257	3.37	
$10,000-$14,999	67	24	6	2	1	265	3.55	
$15,000-$24,999	69	24	4	1	2	296	3.58	
$25,000 or more	73	20	1	3	3	141	3.56	
Change in income, 1976 versus 1975:								
Higher	60	27	6	4	3	482	3.36	2.95
About the same	55	28	9	5	3	438	3.26	
Lower	67	22	5	3	3	455	3.46	
Per capita household income:								
Under $2,000	56	24	12	6	2	192	3.27	3.45*
$2,000-$3,999	59	28	6	4	3	328	3.36	
$4,000-$6,999	64	25	6	3	2	339	3.47	
$7,000 or more	68	25	3	2	2	292	3.56	
Household size:								
1	49	29	11	6	5	248	3.11	8.27**
2	59	28	6	4	3	428	3.36	
3 to 4	65	24	5	4	2	497	3.46	
5 or more	66	21	7	4	2	234	3.43	
Children:								
Yes	65	22	6	4	3	608	3.43	5.57*
No	57	28	7	4	4	775	3.31	
Region:								
Northeast	62	25	7	3	3	397	3.42	4.98**
North Central	63	25	5	5	2	401	3.43	
South	53	29	9	5	4	373	3.23	
West	64	20	8	4	4	236	3.37	
Community size:								
Large metro	64	20	7	5	4	523	3.37	1.75
Small metro	61	27	6	4	2	470	3.41	
Nonmetro (rural)	55	30	8	5	2	414	3.31	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 20--Usefulness of USDA grade on all canned or frozen fruits and vegetables, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	33	38	17	9	3	1,191	2.88	18.73**
Male	25	36	16	16	7	214	2.56	
Age:								
Under 25	34	38	20	4	4	156	2.91	3.99**
25-34	30	35	22	9	4	329	2.77	
35-49	33	39	15	10	3	349	2.89	
50-64	34	40	14	10	2	353	2.92	
65 plus	28	36	13	16	7	220	2.61	
Education:								
Elementary or less	29	29	19	17	6	208	2.59	3.65**
Some high school	32	44	12	6	6	220	2.91	
High school graduate	34	38	15	10	3	493	2.91	
Vocational or some college	35	35	18	9	3	279	2.88	
College graduate	24	41	21	10	4	198	2.72	
Employment:								
Yes	30	36	19	11	4	616	2.76	5.06*
No	33	39	15	9	4	783	2.98	
Family income:								
Under $5,000	29	37	18	12	4	196	2.75	2.04
$5,000-$9,999	36	34	13	14	3	256	2.87	
$10,000-$14,999	28	43	18	8	3	266	2.85	
$15,000-$24,999	32	37	19	8	4	297	2.86	
$25,000 or more	36	44	14	5	1	139	3.08	
Change in income, 1976 versus 1975:								
Higher	31	37	19	10	3	481	2.82	.09
About the same	30	42	15	10	3	437	2.84	
Lower	35	35	16	11	3	457	2.86	
Per capita household income:								
Under $2,000	37	34	19	8	2	194	2.94	.73
$2,000-$3,999	30	38	16	12	4	327	2.79	
$4,000-$6,999	32	39	17	9	3	343	2.89	
$7,000 or more	31	41	16	9	3	289	2.88	
Household size:								
1	26	35	16	15	8	246	2.55	8.64**
2	32	38	15	12	3	429	2.83	
3 to 4	33	40	17	7	3	498	2.92	
5 or more	35	35	20	8	2	234	2.92	
Children:								
Yes	32	38	19	8	3	608	2.88	3.14
No	30	38	15	12	5	774	2.78	
Region:								
Northeast	30	38	16	12	4	394	2.79	1.39
North Central	28	39	20	9	4	398	2.79	
South	35	39	14	8	4	378	2.93	
West	34	33	16	13	4	237	2.81	
Community size:								
Large metro	34	34	17	11	4	521	2.85	1.92
Small metro	31	42	14	10	3	475	2.89	
Nonmetro (rural)	28	37	20	10	5	411	2.74	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 21--Usefulness of whether fresh fruits and vegetables have a wax of preservative coating, by 11 demographic variables, 1977

Demographic variables	Usefulness					Observations	Average usefulness score	F value 1/
	Extremely	Very	Somewhat	Not too	Not at all			
	Percent					Number	Score	Value
Sex:								
Female	24	28	18	20	10	1,178	2.38	1.68
Male	17	35	16	21	11	210	2.27	
Age:								
Under 25	24	28	23	20	5	154	2.46	6.37**
25-34	23	30	19	19	9	325	2.38	
35-49	27	31	16	17	9	344	2.49	
50-64	26	28	17	20	9	350	2.41	
65 plus	14	28	16	27	15	218	1.99	
Education:								
Elementary or less	15	23	19	29	14	200	1.96	7.41**
Some high school	26	24	17	23	10	216	2.33	
High school graduate	22	32	17	21	8	491	2.37	
Vocational or some college	26	33	16	16	9	279	2.52	
College graduate	27	32	19	15	7	200	2.58	
Employment:								
Yes	22	31	19	19	9	604	2.37	.02
No	25	28	16	21	10	779	2.36	
Family income:								
Under $5,000	19	28	16	27	10	189	2.18	2.64*
$5,000-$9,999	25	30	15	21	9	257	2.40	
$10,000-$14,999	25	32	14	19	10	258	2.43	
$15,000-$24,999	21	31	23	17	8	294	2.39	
$25,000 or more	27	33	15	18	7	142	2.56	
Change in income, 1976 versus 1975:								
Higher	24	30	18	20	8	476	2.42	.39
About same	22	29	19	20	10	431	2.34	
Lower	23	29	16	20	12	454	2.33	
Per capita household income:								
Under $2,000	25	27	15	23	10	191	2.32	.58
$2,000-$3,999	22	33	18	19	8	323	2.40	
$4,000-$6,999	24	29	16	20	11	340	2.36	
$7,000 or more	23	33	19	19	6	286	2.47	
Household size:								
1	16	30	17	26	11	242	2.13	5.43**
2	23	27	17	23	10	420	2.31	
3 to 4	25	32	18	17	8	498	2.49	
5 or more	25	29	19	16	11	232	2.43	
Children:								
Yes	25	30	19	17	9	606	2.46	7.16**
No	22	28	17	23	10	762	2.27	
Region:								
Northeast	27	30	19	16	8	393	2.51	4.36**
North Central	22	29	18	22	9	399	2.31	
South	17	30	18	25	10	366	2.19	
West	29	28	16	16	11	234	2.46	
Community size:								
Large metro	30	26	16	18	10	522	2.50	8.62**
Small metro	21	34	17	19	9	464	2.40	
Nonmetro (rural)	16	28	21	26	9	404	2.15	

1/ F values significant at 0.05 level are indicated by *, and F values significant at 0.01 level are indicated by **.

Appendix table 22--Questionnaire completion rates and reasons if questionnaires were not completed

Item	1976		1977	
	Number	Percent	Number	Percent
Total eligible households	1,966	100.0	1,985	100.0
Known eligible households:				
Questionnaires completed	1,417	72.0	1,433	72.2
Refusals	232	11.8	297	15.0
Questionnaires completed but returned too late	15	.7	7	.4
Respondent not at home	18	.9	8	.4
Other (illness, language problem, etc.)	42	2.1	18	.9
Unknown eligible households:				
Not at home	155	7.8	130	6.6
Households not contacted (could not get in, areas were too dangerous, and interviewer error)	87	4.4	92	4.6

Appendix table 23--Questionnaire completion rates by geographic region, 1976, 1977

Item	1976			1977		
	Total eligible households	Questionnaires completed		Total eligible households	Questionnaires completed	
	Number	Number	Percent	Number	Number	Percent
Total sample	1,966	1,417	72.1	1,985	1,433	72.2
Northeast 1/	525	354	67.4	576	407	70.7
North Central	552	406	73.6	548	376	68.6
South	549	424	77.2	500	394	78.8
West	340	233	68.5	361	256	70.9

1/ Maryland, District of Columbia,and some northern Virginia counties were included in the Northeast region in calculating response rates, and in the analysis of survey household data.

Appendix table 24--Questionnaire completion rates by type of community, 1976, 1977

Item	1976			1977		
	Total eligible households	Questionnaires completed		Total eligible households	Questionnaires completed	
	Number	Number	Percent	Number	Number	Percent
Total sample	1,966	1,417	72.1	1,985	1,433	72.2
SMSA of 1 million or more persons	856	567	66.2	946	635	67.1
SMSA under 1 million persons and urban areas of non-SMSA	733	537	73.3	703	527	75.0
Rural, non-SMSA	377	313	83.0	336	271	80.6

*U.S. GOVERNMENT PRINTING OFFICE : 1979 0-310-945/ESCS-182